

ASTWG-Owned Sampling Equipment Available for NMFS-Wide Surveys

Dual-Frequency Identification Sonar (DIDSON)

The DIDSON is an "imaging" sonar that uses acoustic lense technology to produce near-video quality images for detection and identification of targets underwater (<http://www.soundmetrics.com/index.html>). This DIDSON is the Standard Version, with depth rated housing for 1000 m. It operates at 1.1 and 1.8 MHz. The system is setup to be deployed autonomously but has a ~20 ft. cable for testing.

Fetch Autonomous Underwater Vehicle (AUV)

The Fetch 3.5 AUV was designed to be a relatively low-cost system that can be hand-deployed from a small craft or beach, survey at speeds ranging from 2 to 10 knots, and instrumented with advanced sampling acoustic and optical technologies. The Fetch is 0.31 m diameter and 2.03 m long with 72.6 kg displacement. The AUV is currently instrumented with a Simrad EK60 ES38-12 38-kHz split-beam echosounder, RDI 300-kHz ADCP, Falmouth Scientific CTD, and Vedere Design stereo imaging with illumination.

EK60 38-kHz deepwater transducer and General Purpose Transceiver

The EK60 is the standard scientific echosounder for marine fisheries. The deepwater transducer has a 7 degree beamwidth and is rated for 1500 m. The General Purpose Transceiver (GPT) is portable and connects to a desktop or laptop PC. The PC is not part of the shared equipment.